## **AMENDMENT**

## In the Claims

Please amend the claims, without prejudice, as follows:

- 1-42. (Canceled).
- 43. (New) A method for treating a human subject afflicted with supraventricular tachyarrhythmia, comprising administering to the human subject a therapeutically effective amount of an agent which restores normal gating to a type 2 ryanodine receptor (RyR2) channel, thereby treating the human subject, wherein the agent is JTV-519.
- 44. (New) The method of claim 43, wherein the amount of the agent is from about 100 nM to about 1000 nM.
- 45. (New) The method of claim 43, wherein the administering is performed using a method selected from the group consisting of topical, intravenous, pericardial, oral, subcutaneous, and intraperitoneal administration.
- 46. (New) A method for treating a human subject afflicted with supraventricular tachyarrhythmia, comprising administering to the human subject a therapeutically effective amount of an agent which inhibits dissociation of FKBP12.6 from a type 2 ryanodine (RyR2) receptor, thereby treating the human subject, wherein the agent is JTV-519.
- 47. (New) The method of claim 46, wherein the amount of the agent is from about 100 nM to about 1000 nM.
- 48. (New) The method of claim 46, wherein the administering is performed using a method selected from the group consisting of topical, intravenous, pericardial, oral, subcutaneous, and intraperitoneal administration.
- 49. (New) A method for inhibiting the onset of supraventricular tachyarrhythmia in a human subject, comprising administering to the human subject a prophylactically

- effective amount of an agent which restores normal gating to a type 2 ryanodine receptor (RyR2), thereby treating the human subject, wherein the agent is JTV-519.
- 50. (New) A method for inhibiting the onset of supraventricular tachyarrhythmia in a human subject, comprising administering to the human subject a prophylactically effective amount of an agent which inhibits dissociation of FKBP12.6 from a type 2 ryanodine (RyR2) receptor in, thereby inhibiting the onset of supraventricular tachyarrhythmia in the human subject, wherein the agent is JTV-519.
- 51. (New) The method of claim 50, wherein the amount of the agent is from about 100 nM to about 1000 nM.
- 52. (New) The method of claim 50, wherein the administering is performed using a method selected from the group consisting of topical, intravenous, pericardial, oral, subcutaneous, and intraperitoneal administration.
- 53. (New) A method for treating a human subject afflicted with supraventricular tachyarrhythmia, comprising administering to the human subject a therapeutically effective amount of an agent which enables FKBP12.6 to bind to PKA-phosphorylated type 2 ryanodine receptor (RyR2) channels, thereby treating the human subject, wherein the agent is JTV-519.
- 54. (New) The method of claim 53, wherein the amount of the agent is from about 100 nM to about 1000 nM.
- 55. (New) The method of claim 53, wherein the administering is performed using a method selected from the group consisting of topical, intravenous, pericardial, oral, subcutaneous, and intraperitoneal administration.
- New) A method for inhibiting the onset of supraventricular tachyarrhythmia in a human subject, comprising administering to the human subject a prophylactically effective amount of an agent which enables FKBP12.6 to bind to PKA-phosphorylated type 2 ryanodine receptor (RyR2) channels, thereby inhibiting the

- onset of supraventricular tachyarrhythmia in the human subject, wherein the agent is JTV-519.
- 57. (New) The method of claim 56, wherein the amount of the agent is from about 100 nM to about 1000 nM.
- 58. (New) The method of claim 56, wherein the administering is performed using a method selected from the group consisting of topical, intravenous, pericardial, oral, subcutaneous, and intraperitoneal administration.
- 59. (New) A method for treating a human subject afflicted with supraventricular tachyarrhythmia, comprising administering to the human subject a therapeutically effective amount of JTV-519, thereby treating the human subject.
- 60. (New) The method of claim 59, wherein the amount of JTV-519 is from about 100 nM to about 1000 nM.
- 61. (New) The method of claim 59, wherein the administering is performed using a method selected from the group consisting of topical, intravenous, pericardial, oral, subcutaneous, and intraperitoneal administration.
- 62. (New) A method for inhibiting the onset of supraventricular tachyarrhythmia in a human subject, comprising administering to the human subject a prophylactically effective amount of JTV-519, thereby inhibiting the onset of supraventricular tachyarrhythmia in the human subject.
- 63. (New) The method of claim 62, wherein the amount of JTV-519 is from about 100 nM to about 1000 nM.
- 64. (New) The method of claim 62, wherein the administering is performed using a method selected from the group consisting of topical, intravenous, pericardial, oral, subcutaneous, and intraperitoneal administration.